

PARCMOW - BIGMOW

Instructions Manual



English version

Read this instructions manual carefully before starting to set up the PARCMOW peripheral wire





Instructions and pictogram

IMPORTANT!



Read the instruction manual carefully in order to understand the contents before starting to use your PARCMOW-BIGMOW.



WARNING!

This automatic mowing device may prove dangerous when used incorrectly. The recommendations for use and safety must be respected absolutely for optimal, completely safe use.



WARNING!

Never place your feet and hands near the rotating blades or below the cover while the PARCMOW-BIGMOW is in operation. Do not put anything on top of the PARCMOW-BIGMOW.



WARNING!

Never use your PARCMOW-BIGMOW when children, animals or people who are unaware are in the mowing area. Always leave your PARCMOW-BIGMOW to operate alone.



IMPORTANT!

Always use suitable protective gloves while working on the PARCMOW-BIGMOW.



IMPORTANT!

DO NOT climb onto or sit on the machine



IMPORTANT!

Transport the machine when turned off (master switch on OFF), to places suitable for transport





Table of contents

Instructions for setting up the peripheral wire


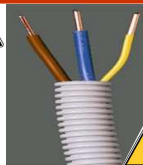
PARCMOW - BIGMOW

1.	Safety recommendations and pictograms	2
2.	Usual distances for the PARCMOW - BIGMOW	4
3.	Setting up the peripheral wire: Islands	6
4.	Setting up the charging station	9
5.	Configuration: Menus	13
6.	Configuration: Settings	15
7.	Configuration: Options	17
8.	Configuration: Parameterisation	20
9.	Safety alert: Error message	23
10.	Important points to verify	24
11.	Conversion tables	27



IT IS ESSENTIAL TO USE THE 1.5 mm² CABLE IN A SEALED TUBE

Any cable other than the 1.5 mm² single strand wire is to be avoided. Belrobotics does not guarantee the operation of the machine with another cable. Any problem that occurs because of incorrect set-up annuls the guarantee.

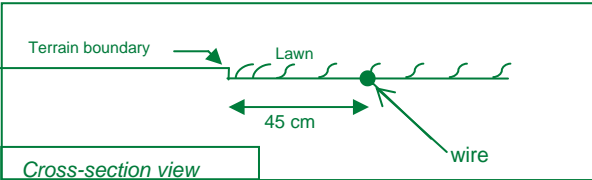
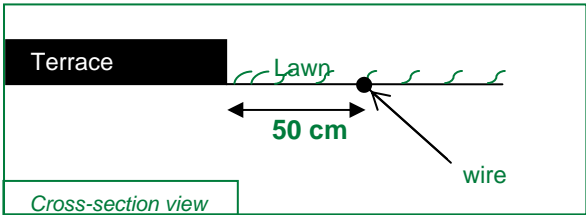
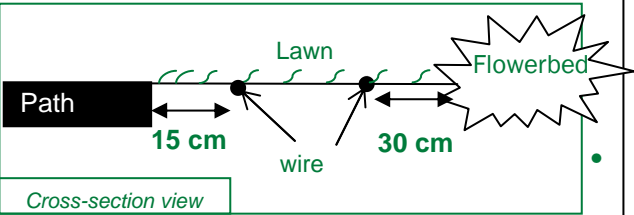
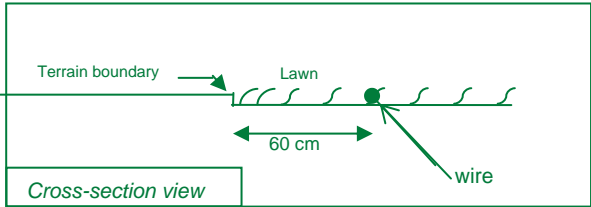
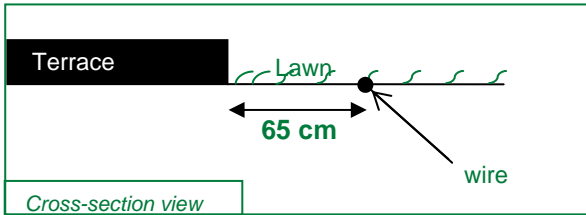
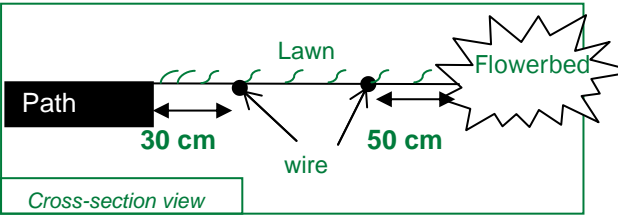




Usual distances for the PARCMOW - BIGMOW (1)

→ These distances are used in several cases. Every terrain is different and it must be kept in mind that different constraints are found in each case.

→ During set up, the installer must work as follows:

PARCMOW	BIGMOW
Reminder: Length of mowing: 65 cm; Length of machine: 95 cm.	Reminder: Length of mowing: 105 cm; Length of machine: 120 cm.
<ol style="list-style-type: none">1) Begin setting up the wire from the charging station.2) Position the wire in a clockwise direction.3) Position the peripheral wire of an island in an anti-clockwise direction.4) The cable is positioned between 2 and 5 cm deep	
<ul style="list-style-type: none">• Generally: 45 cm from the boundary  <p>Cross-section view</p> <ul style="list-style-type: none">• Edges, terraces, hollows: 50 cm  <p>Cross-section view</p> <ul style="list-style-type: none">• Paths, Flowerbeds, at lawn level: between 15 cm and 30 cm  <p>Cross-section view</p>	<ul style="list-style-type: none">• Generally: 60 cm from the boundary  <p>Cross-section view</p> <ul style="list-style-type: none">• Edges, terraces, hollows: 65 cm  <p>Cross-section view</p> <ul style="list-style-type: none">• Paths, Flowerbeds, at lawn level: between 15 cm and 30 cm  <p>Cross-section view</p>



IT IS ESSENTIAL TO USE THE 1.5 mm² CABLE IN A SEALED TUBE

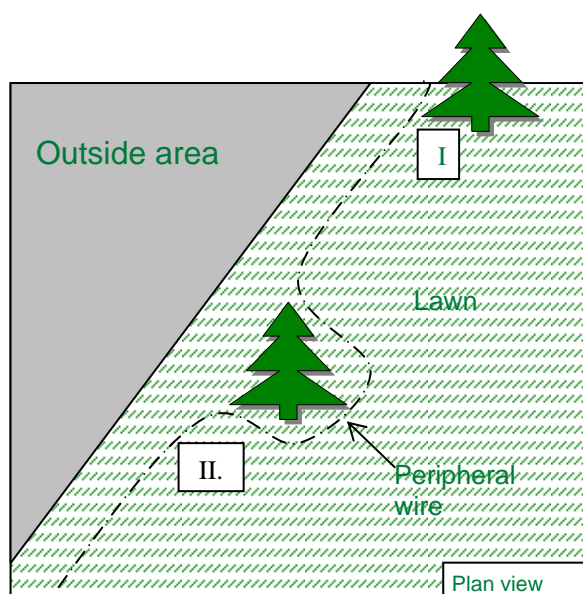




Usual distances for the PARCMOW - BIGMOW (2)

→ Obstacles :

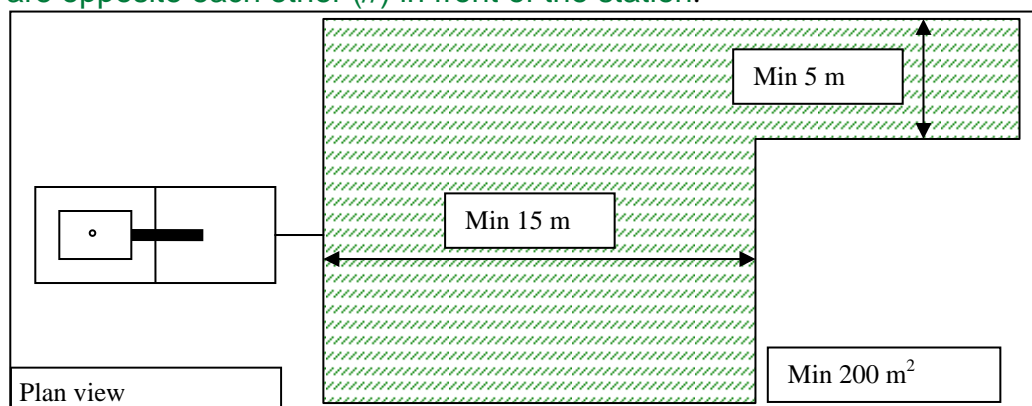
- I. Located more than 1 m from the edge of the terrain: there are 2 solutions.
 1. Either the wire passes normally (reminder: 45 cm)
 2. Or the wire passes in front of the obstacle (the small plot behind the obstacle will not be mowed)
- II. Located less than 1 m from the edge of the terrain: the wire passes in front.



→ Minimal mowing area (for demonstration): 15 m X 15 m (\approx 2 hundred metres squared)

→ Passage: minimum distance of 5 m between the wires.

→ It is worth ensuring a minimum distance of 15 m. between the peripheral wires when they are opposite each other (//) in front of the station.



IT IS ESSENTIAL TO USE THE 1.5 mm² CABLE IN A SEALED TUBE



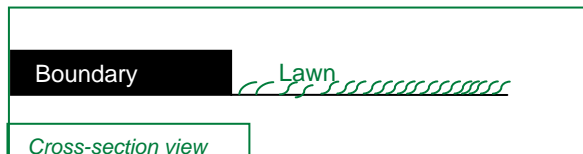


Setting up the peripheral wire: Islands (1)

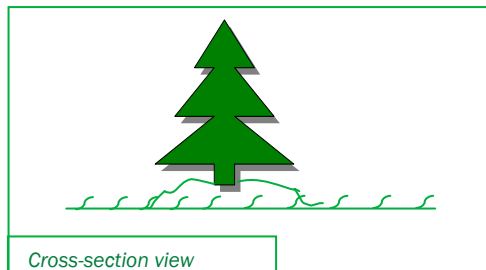
→ Always limit the creation of islands.

→ When to create an island?

1. When the part to isolate is found near a flowerbed or a boundary and there is no physical barrier (e.g. a flowerbed in the middle of the garden).

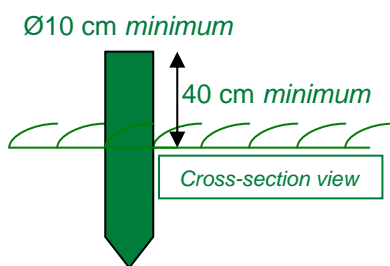


1. When tree roots are flush to the lawn.



→ Alternative solution to creating an island?

1. Create a physical boundary (edge, pickets) in such a way that the PARCMOW-BIGMOW sonar detects them (minimum 40 cm high).



1. Certain boundaries do not need protection (trees ...).



→ For swimming pools, lakes, ponds, etc. (critical areas).



You must set up a boundary wire AND protect the water feature by a physical boundary. When the station power is cut, the machine continues for 1 metre (1 second) before stopping and therefore you must set up a physical boundary near a critical area.



IT IS ESSENTIAL TO USE THE 1.5 mm² CABLE IN A SEALED TUBE





Setting up the peripheral wire: Islands (2)

→ Distances regarding the peripheral wire:

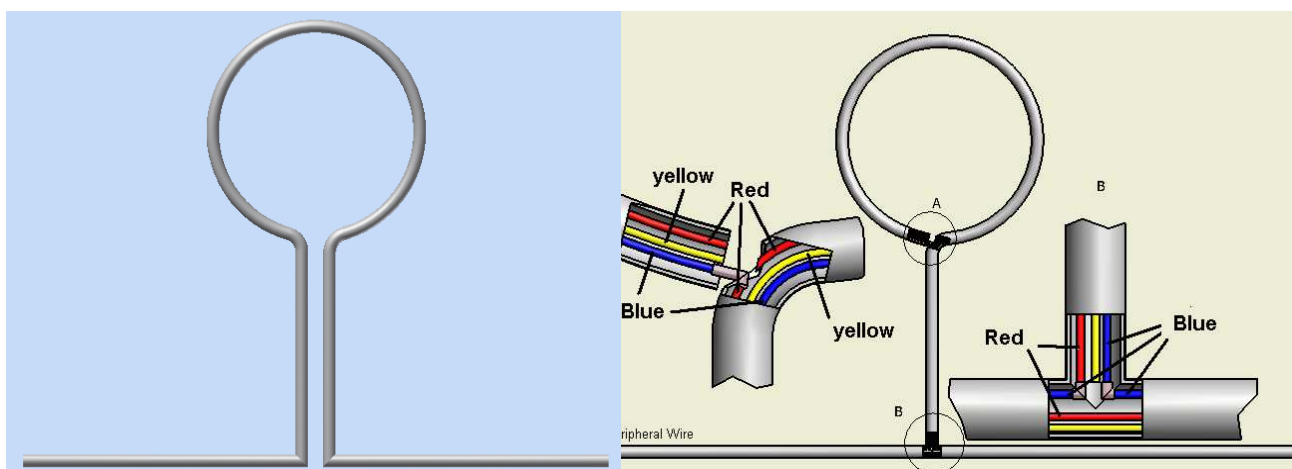
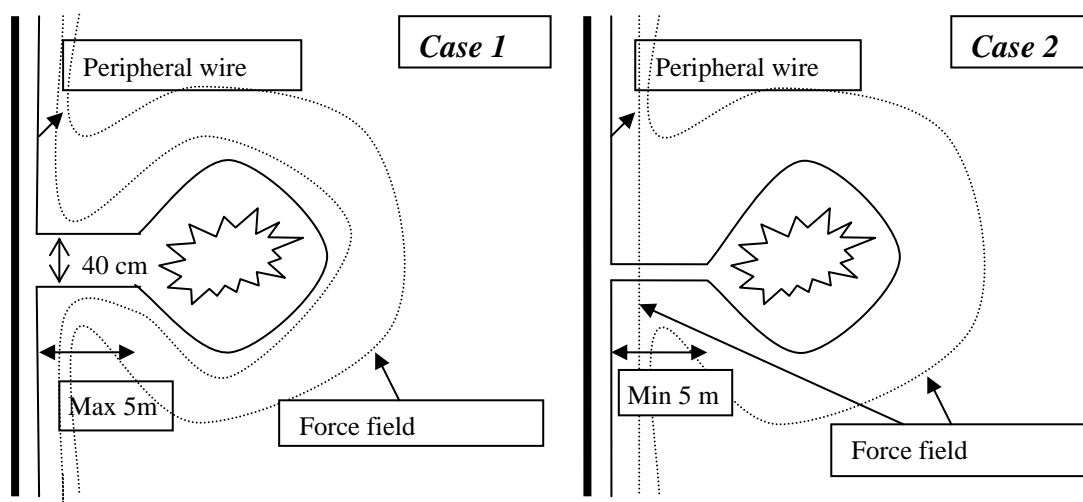
Case 1: distance less than 5 metres from wire to wire.

Case 2: distance from 5 metres from wire to wire.

Explanation:

→ In case 1, during the return to the station, the machine will go around the island considering the force fields connected to the island as the terrain boundary.

→ In case 2, during return to the station, the machine will follow its exterior peripheral wire without taking the island into account.



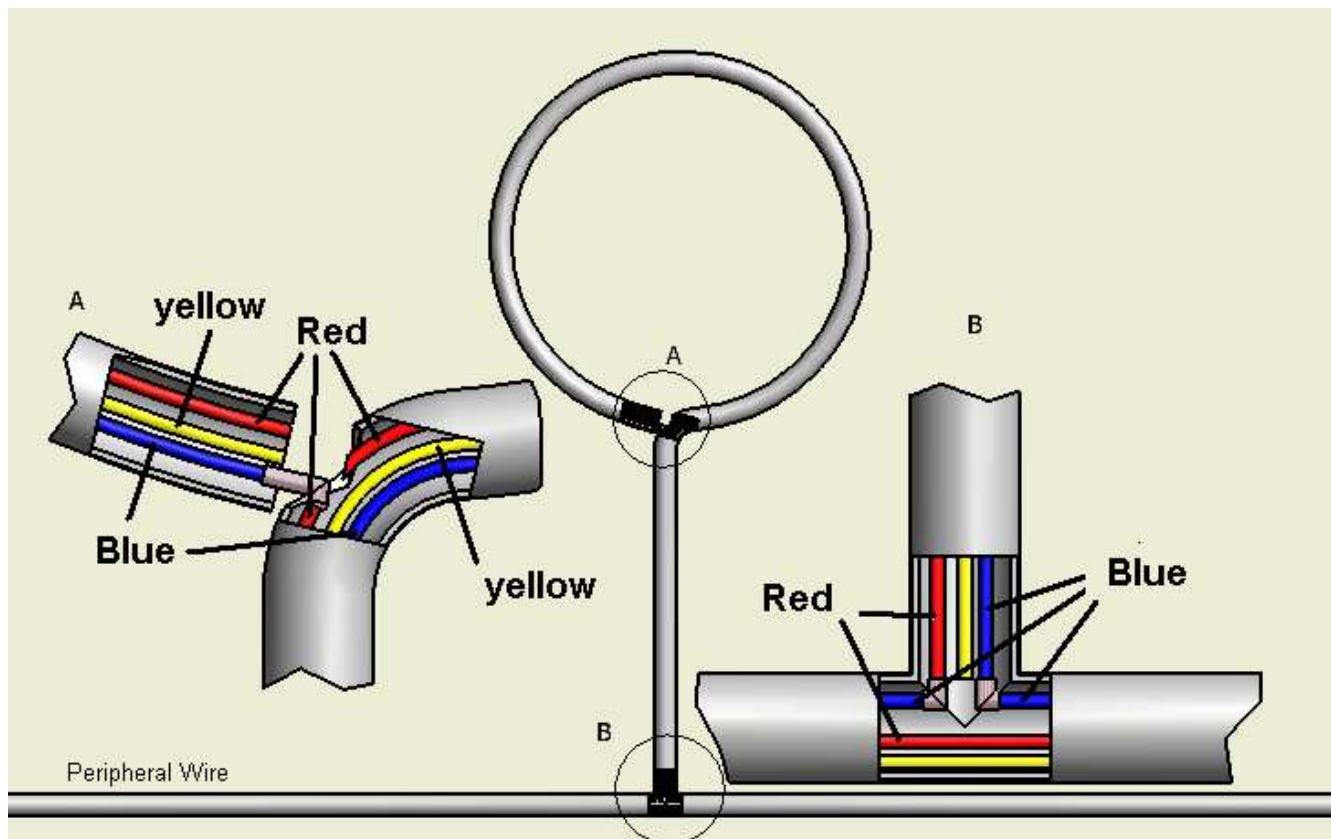
IT IS ESSENTIAL TO USE THE 1.5 mm² CABLE IN A SEALED TUBE





Setting up the peripheral wire: Islands (3)

→ Island connector configuration:



→ The cable set up is the 1G1.5 mm² or the 3G1.5 mm², single strand wire.

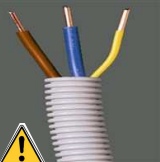

→ The blue or black cable is used for the peripheral wire.

→ The red cable is used for the return from an island. When an island is created at more than 5 metres from the peripheral wire, the same sheath is used for the return of the signal. This enables the signal to be cancelled and the machine to cross.

→ *The yellow cable is only used for special connections.*


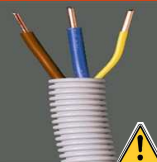



Pay attention to the direction of the island and its connections (the cables may not be crossed). When the peripheral wire is cabled in a clockwise direction, the island is cabled in an anti-clockwise direction.



IS ESSENTIAL TO USE THE 1.5 mm² CABLE IN A SEALED TUBE

Any cable other than the 1.5 mm² single strand wire is to be avoided. Belrobotics does not guarantee the operation of the machine with another cable. Any problem that occurs because of incorrect set-up annuls the guarantee.



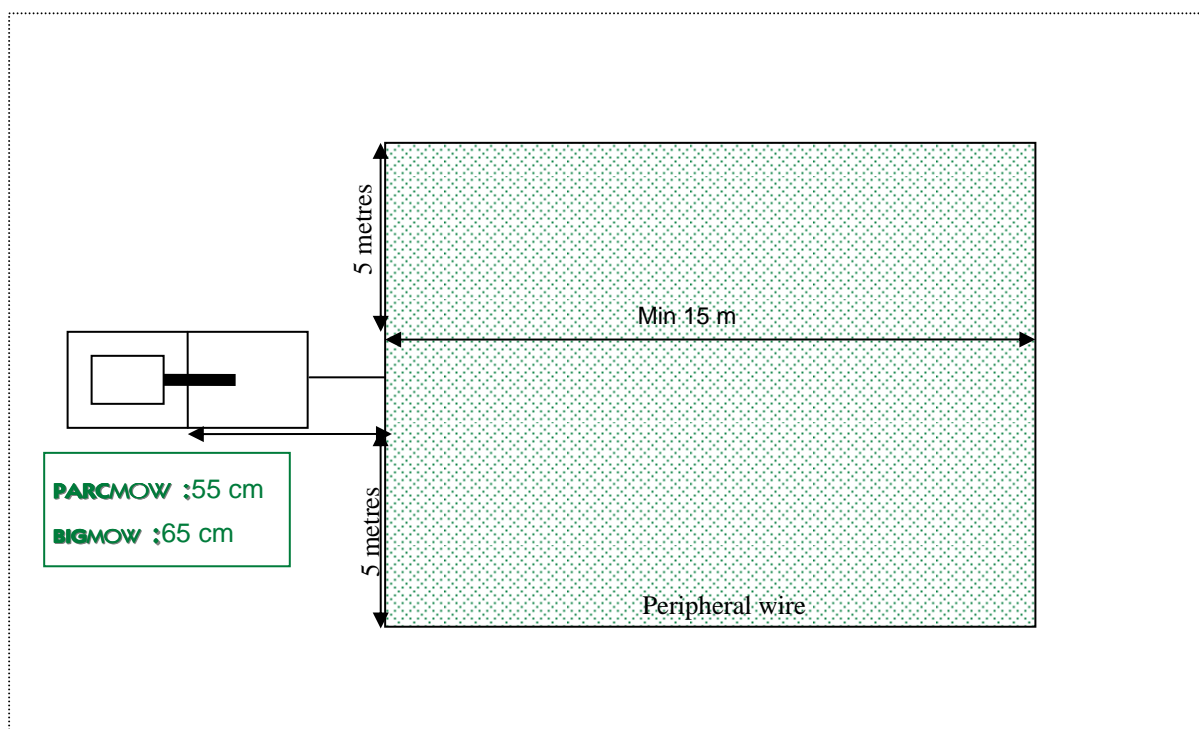


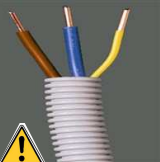

Setting up the charging station (1)

For optimal operation, the charging station must be placed in the main area of the terrain, offering the greatest clearance possible.

→ Distance to keep

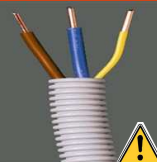

- Minimum 15 m between the station and the peripheral wire opposite the station
- For a **PARCMOW**: a distance of **55 cm** between the peripheral wire and the station
- For a **BIGMOW**: a distance of **65 cm** between the peripheral wire and the station
- Set up the cable in a straight line at a distance of 5 metres on either side of the station
- The station must be set up on a **flat** terrain





IS ESSENTIAL TO USE THE 1.5 mm² CABLE IN A SEALED TUBE

Any cable other than the 1.5 mm² single strand wire is to be avoided. Belrobotics does not guarantee the operation of the machine with another cable. Any problem that occurs because of incorrect set-up annuls the guarantee.





Setting up the charging station (2)

→ Cabling

1. Bring the cables back below the station (make the holes ad hoc).
2. Use the sheath (tube) of the peripheral wire to bring the peripheral wires to the station (avoid any contact with the ground).
3. Connections:

Station → 2008

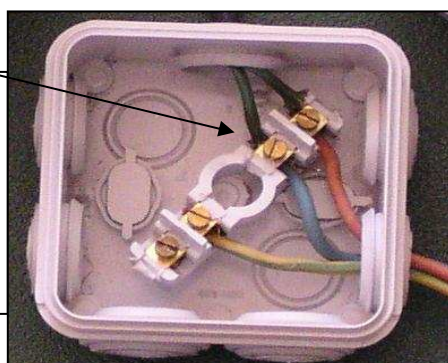
*230V~: blue and orange wire

*115V~: blue and green wire

Station 2008 →

*230V~: specific transformer

*115V~: specific transformer

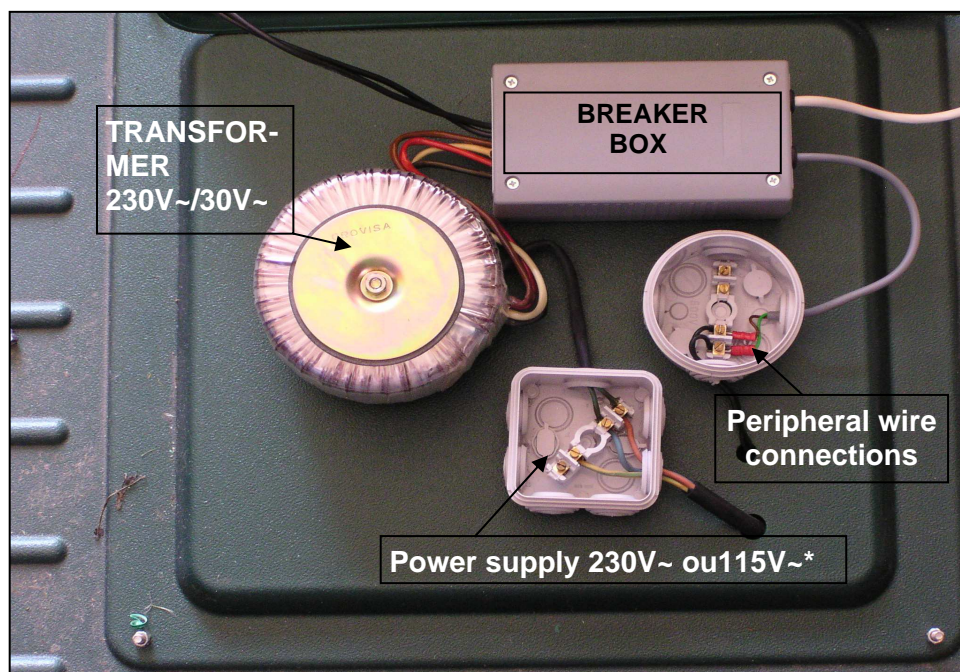


Power supply connections



Peripheral wire connections

4. Constitutive components:



TRANSFORMER
230V~/30V~

BREAKER
BOX

Peripheral wire
connections

Power supply 230V~ ou 115V~*



IS ESSENTIAL TO USE THE 1.5 mm² CABLE IN A SEALED TUBE

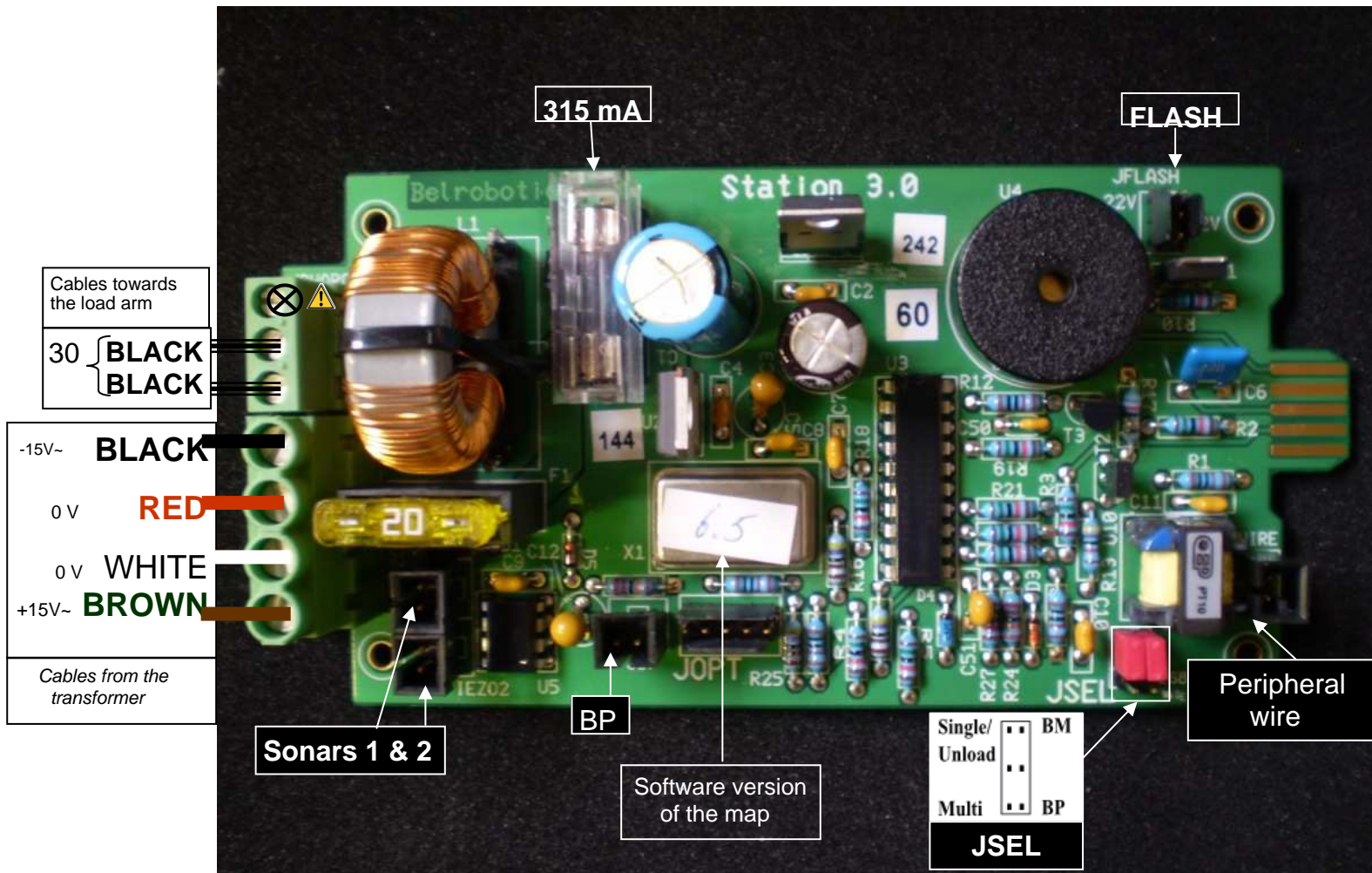
Any cable other than the 1.5 mm² single strand wire is to be avoided. Belrobotics does not guarantee the operation of the machine with another cable. Any problem that occurs because of incorrect set-up annuls the guarantee.





Setting up the charging station (3)




5. Station map (ref BR15601: CI Station)





Setting up the charging station (4)

6. Multi-station configuration

MACHINES				STATIONS		
PARCMOW BIGMOW	Config. Option 0 PARCMOW - BIGMOW	BALL- PICKER	Config. Option 0 BALLPICKER	Station PARCMOW/ BIGMOW	Waste dump station	Charging station BALLPICKER
1	—	0		Single/ Unload  BM Multi  BP		
1	—	1	✓	Single/ Unload  BM Multi  BP	Single/ Unload  BM Multi  BP	
1	—	>2	✓	Single/ Unload  BM Multi  BP	Single/ Unload  BM Multi  BP	Single/ Unload  BM Multi  BP
>2 >2Station	✓	0		Single/ Unload  BM Multi  BP		
>2 >2Station	✓	1	✓	Single/ Unload  BM Multi  BP	Single/ Unload  BM Multi  BP	
>2 >2Station	✓	>2	✓	Single/ Unload  BM Multi  BP	Single/ Unload  BM Multi  BP	Single/ Unload  BM Multi  BP
0		1	—		Single/ Unload  BM Multi  BP	
0		>2	✓		Single/ Unload  BM Multi  BP	Single/ Unload  BM Multi  BP






Configuration: Menus (1)

Use of the keypad

The keypad includes 16 keys (10 numbers and 6 action keys) and 1 activation key  :

- 'F1': Return to the charging station
- 'F2': Return to and wait at the charging station
- 'F3': See debug, or technical indication
- '#': To select the chosen action
- '*': To enter the code, or the selection of rest days
- 'C': To go back to the previous menu or to delete

To start up the machine, you have to press  (the screen blinks), then close the cover again within 8 seconds. The **BIGMOW-PARCMOW** will start up its cutting heads then start to work



Functions

2 submenus are found in the "Belrobotics" menu:

The "Infos" menu (which is addressed to your technician), for all information about the operation of your **BIGMOW-PARCMOW** ;

The "Settings" menu, to access the user settings.

The selection of * enables the user code to be entered and the machine to be activated for a chosen period. After this period, the machine stops and the code has to be re-entered. Before a delayed start, it is therefore advised that you re-enter the code. Without this code, the machine will not operate .

Keypad keys

- F1** : Return to the charging station
- F2** : Return to and wait at the charging station
- ▲** : go up in the menus
- F3** : See debug ; **▼** go down in the menus
- #** : Selection
- *** : Code entry, rest days
- C** : Go back one level in the menu or delete
- 0** : Numeric entries
- 9** : Numeric entries
- On** : Turn on the machine, start up

Structure of the menus

Menu

- Infos
 - Statistics
 - History
 - Version
 - Serial
- Settings
 - Rests settings
 - Clock
 - New code
 - Language
 - Options
 - Suppress Rests

'*' + ' _ _ _ ' user code



Configuration: Menus (2)

“Infos” Menu

This menu is addressed to your technician. It includes 4 submenus:

1) The “Statistics” menu enables general information about the operation of your machine to be displayed.

CODE	MEANINGS
S0	Mowing time (minutes)
S1	Charging time (minutes)
S2	Total number of cycles (Mowing+Charge)
S3	Left wheel distance (metres)
S4	Right wheel distance (metres)
S5	Battery status; Capacity of the last charge
S6	Battery status; Capacity of the last discharge
S7	Rest time (minutes)

2) The “History” menu enables the events recorded by the machine to be displayed.

CODE	SIGNIFICATIONS
S	Begin seeking station
Wcxx	Begin Working/charged xx%
Cwxx	Begin Charge/worked xx%
Rcxx	Begin Rest on charge/charged xx%
→U	Panel Opened by User
→Go	Start to work
ON	Switched on
— —	Switched off
AL	Alarm
SC	Station capture
AS	Abort Capture Seek
NP	New Program

3) The “Version” menu enables the machine software version to be obtained.

4) The “Serial” menu enables the serial number of the main menu to be displayed.

“Settings” Menu 7 submenus:

1) The “Rests settings” menu enables the rest range to be programmed (see p.22).

2) The “Clock” menu enables the modification of the time and the date (see p.22).

3) The “New code” menu enables the modification of the user code (see p.23).

4) The “Language” menu gives the choice of the language (see p.23).

5) The “Debug-info” menu enables either the time, or the information to be displayed (see p.23).

6) The “Options” menu:

7) The “Suppress rests” menu enables all

000	MultiSta	007	OutWSyst
001	GoToChge	008	Philnv
002	Stay@Chge	009	HeadRotInv
003	DemoMode	010	CCWSeek
004	NoChgeBip	011	Chge2Sides
005	SystMowing	012	EnCapture
006	CCWSyst	013	Udocking



Configuration: Settings (1)

"SETTINGS" MENU

- **Rests settings**

Allows the programming of up to four rest ranges during which the machine does not work.


1. Indication **Menu** (C to return to the **Menu**)
2. Type "# ▼" **Settings** "# Rests settings" "# Rest range 1#" "# Rest hours" "# (that is "# ▼ # # # #").
3. Encode HH:MM for the start of rest then HH:MM end of rest. To confirm, type "#".
4. Choose the day or days of the week during which this timetable applies scrolling with ▼ and ▲. To select the day, type "*". When the days have been chosen, type "#".

Range 1# : __: __ → __: __
☐ Mon ☐ Tue ☐ Wed ☐ Thu ☐ Fri ☐ Sat ☐ Sun

Range 2# : __: __ → __: __
☐ Mon ☐ Tue ☐ Wed ☐ Thu ☐ Fri ☐ Sat ☐ Sun


Range 3# : __: __ → __: __
☐ Mon ☐ Tue ☐ Wed ☐ Thu ☐ Fri ☐ Sat ☐ Sun

Range 4# : __: __ → __: __
☐ Mon ☐ Tue ☐ Wed ☐ Thu ☐ Fri ☐ Sat ☐ Sun

5. You have returned to the **rest range 2#**. If you would like to encode other rest times for other days, follow steps 2 to 5 again. A maximum 4 rest areas can be programmed. Then, press "C" several times until the **Menu** is displayed on the screen.
6. Restart the machine by pressing  on the keypad and close the cover within 8 seconds.

The rest ranges are programmed and operational. If you have any doubts with regard to the programming of the rest ranges, do not hesitate to contact your dealer, who will do it for you.

- **Setting the clock** Enable the modification of the time and the date.

1. Indication **Menu** (C to return to the **Menu**).
2. Type "# ▼" **Settings** "# ▼" **Clock** "# (that is "# ▼ # ▼ #").
3. Enter the time "HH:MM" "0 ... 9".
4. Enter the day (1=Monday;.....; 7=Sunday).
5. Press "▼".
6. Enter the date "DD/MM".
7. Enter the year 20__ "0 ... 9".
8. Confirm by pressing "#".
9. Press "C" 3 times until the **Menu** is displayed.
10. Restart the machine by pressing  on the keypad and close the cover within 8 seconds




Configuration: Settings (2)

- **Setting of the password** Enables the modification of the user code.
 1. Indication **Menu** (C to return to the **Menu**).
 2. Type "# ▼" **Settings** "# ▼ ▼" **New Code** "#" (that is "# ▼ # ▼ ▼ #").
 3. Enter the old code "* _ _ _ ". To confirm, press "#".
 4. Enter the new code "# _ _ _ ". To confirm, press "#".
 5. Press **C** 3 times until the **Menu** is displayed.
 6. Enter the new code before starting
 7. Enter the new code "* _ _ _ ".
 8. Enter the names of the day of validity of the code (except for the programme version 2009).



Warning, when the machine protection is activated, you must reintroduce its code at the end of the validity, or the machine stops and requests its code.

- **Setting the language**
Give a choice between français, English, Deutsch, italiano, español and Nederlands.
 1. Indication **Menu** (C to return to the **Menu**)
 2. Type "# ▼" **Settings** "# ▼ ▼ ▼" **Language** "#" (that is "# ▼ # ▼ ▼ ▼ #")
 3. Select the language by pressing "▼" ; Validate with "#"
 4. Press "**C**" 3 times until the **Menu** is displayed.
 5. Restart the machine by pressing  on the keypad and close the cover within 8 seconds.

- **See debug F3**
Enables either the time, or the service information (technical information) to be displayed.

1. Indication **Menu** (C to return to the **Menu**)
2. Type "F3"

Indication of the phase in the middle of the screen.

Technical information instead of the time:

- P03 equivalent in the place of hours (P03 in the authorised parameters)
- P04 equivalent in the place of minutes (P04 in the authorised parameters)

Phase
Φ+ : Machine within its mowing area
Φ- : Machine outside its mowing area



Configuration: Options (1)

→ See the full explanations in the instruction manual ←

√ : Option activated; - : Option deactivated

Press “#” to activate or deactivate an option

1. Indication **Menu** (C to return to the **Menu**).
2. Type “# ▼” **Settings** “# ▲▲” **Options** “#” (that is “# ▼# ▲▲ #”).
3. Indication Option 1: **001:GoToChge**.

- **Multi-charging station 000 MultiSta**

Multi-station mode enables several stations to be managed with one or several robot.

000 MultiSta: - The **BIGMOW-PARCMOW** only returns to a normal station

000 MultiSta: √ The **BIGMOW-PARCMOW** only returns to stations configured as Multi-station



If this option is validated, the machine no longer returns to its ‘normal’ station.

- **Immediate return to the charging station 001 GoToChge**

Forces the machine to return immediately to its charging station.

1. Indication **Menu** (C to return to the **Menu**)
2. Shortcut “F1” (see p.20)

001 GoToChge: - The **BIGMOW-PARCMOW** does not return to its station and works normally

001 GoToChge: √ The **BIGMOW-PARCMOW** returns to its station



When the option 001 Return to the charging station is selected, the machine will start up again after full recharge.

- **Wait at the station after charge 002 Stay@Chge**

Forces the machine, after the end of its cycle, to stay at its station and not leave it again.

Also see the commands summarised at the end of the manual.

1. Indication **Menu** (C to return to the **Menu**)
2. Shortcut “F2” (see p.20)

002 Stay@Chge: - The **BIGMOW-PARCMOW** does not return to its station and works normally

002 Stay@Chge: √ The **BIGMOW-PARCMOW** returns to its station and stays there



When option 002 Stay at the charging station is selected, the machine will not start up until this option is cancelled .



To force the machine to start working again, press  and close the cover (the machine has to be in contact with the station automatically)



Configuration : Options (2)

→ See the full explanations in the instruction manual ←

√ : Option activated; - : Option deactivated

Press “#” to activate or deactivate an option

- **Demonstration Mode (without mowing) O03 DemoMode**

Normal or demonstration (without mowing) mode.

O03 DemoMode: - The **BIGMOW-PARCMOW** works normally

O03 DemoMode: √ The **BIGMOW-PARCMOW** advances without using the cutting heads



If this option is validated, the machine can operate without signal, and therefore leave the mowing area.

- **Silence when charging (no charging ‘beep’) O04 NoChgeBip**

Signal sounds when charging (with or without). Silent charging.

O04 NoChgeBip - The **BIGMOW-PARCMOW** beeps during charging (2 long beeps/2 sec)

O04 NoChgeBip: √ The **BIGMOW-PARCMOW** remains silent when charging



During a manual charge the machine beeps 2 short beeps/sec to warn that it is not charging automatically. To cancel these beeps in manual charge, you can select option 2.

- **Systematic mowing O05 SystMowing**

Mowing mode (random standard or systematic).


O05 SystMowing: - The **BIGMOW-PARCMOW** operates in normal mode, i.e. in random mode

O05 SystMowing: √ The **BIGMOW-PARCMOW** operates in systematic mode

- **Anti-clockwise direction (in systematic mode) O06 CCWSyst**

In systematic mode: the machine moves on the terrain in a clockwise direction or anti-clockwise towards the centre. Only useful if the systematic mode is selected O05 SystMowing: √

O06 CCWSyst : - The **BIGMOW-PARCMOW** turns in a clockwise direction  in systematic mode

O06 CCWSyst: √ The **BIGMOW-PARCMOW** turns in an anti-clockwise direction  in systematic mode

- **Movement from the centre towards the exterior or from the exterior towards the centre (in systematic mode) O07 OutWSyst**

In systematic mode, the machine works from the interior towards the exterior. It is only useful if the Systematic mode is selected O05 SystMowing: √

Not selected, the direction is the opposite: from the exterior towards the interior.

O07 OutWSyst: - The **BIGMOW-PARCMOW** moves from the exterior to the interior in systematic mode

O07 OutWSyst: √ The **BIGMOW-PARCMOW** moves from the interior to the exterior in systematic mode



The systematic mode is very rarely used and not recommended. The random mode has a greater efficiency and a greater aim in terms of the results of the work.



Configuration : Options (3)

→ See the full explanations in the instruction manual ←

√ : Option activated; - : Option deactivated

Press “#” to activate or deactivate an option

- **Inversion of phase. O08 Philnv**

Enables inversion of the detection of the peripheral wire field.

O08 Philnv: - Depending on the phase of the terrain

O08 Philnv: √ Depending on the phase of the terrain



To verify the phase of the terrain, use the F3 function: see debug, the indication of the phase must be positive. (Φ+)

- **Inversion left cutting head. O09 HeadRotInv**

Make the left cutting trays turn in the opposite direction to avoid grass jam.

O09 HeadRotInv: - The heads of the **BIGMOW-PARCMOW** turn in the same direction

O09 HeadRotInv: √ The heads of the **BIGMOW-PARCMOW** turn 3 times in one direction ↻ and twice in the other.

- **Direction of return to the station: Anti-clockwis O10 CCWSeek**

In random mode, force the machine to return to its charging station in an anti-clockwise or clockwise direction.

O10 CCWSeek: - The **BIGMOW-PARCMOW** returns in a clockwise direction ↻ to return to the station

O10 CCWSeek: √ The **BIGMOW-PARCMOW** returns in an anticlockwise direction ↻ to return to the station



The machine returns to its station following its peripheral wire at a distance of approximately 1 metre

- **Charging the machine from both sides O11 Chge2Sides**

Allows the machine to return to its charging station in both directions (clockwise and anti-clockwise) and cancels option 010 CCWSeek.

O11 Chge2Sides: - The **BIGMOW-PARCMOW** returns to the station in one direction (that of option 9)

O11 Chge2Sides: √ The **BIGMOW-PARCMOW** returns to the station in both directions (1* ↻, 1* ↻)

Option 10 is of no use in this configuration

- **Mode capture de la station O12 EnCapture**

The machine returns to charge, if necessary, by passing in front of its station, it passes it, and then makes a half turn before placing itself on its wire and entering the station. This saves time following the peripheral wire.

O12 EnCapture: - It returns to station following its wire when the batteries are low

O12 EnCapture: √ Station sensor mode when the batteries are nearly low

Make a half turn after its station to charge, not taking into account option 13

- **Return to the station mode O13 Udocking**

If the option is selected, the machine returns to charge itself, by passing in front of its station, it passes it, and then makes a half turn before coming to position itself on its wire and entering the station.

O13 Udocking: - It returns to station by placing itself directly on its wire once the station is detected

O13 Udocking: √ It returns to station by passing in front of the station, it passes it, and then makes a half turn coming to position itself on its wire and entering the station



Safety alert: Error message

CODE	MEANINGS	REMARQUES
AI01→ →AI31	Blocked head(s) (1, 2, 3, 4, 5)	Indication on the screen → <i>Check the cutting components</i>
AI32→ →AI35	Left and/or right wheel blocked	Indication on the screen → <i>Check the driving components</i>
AI36→ →AI39	Body in left and/or right collision	Impact sensors → <i>Check the body impact components</i>
AI40→ →AI43	Tactile sensor (touch flange) in left and/or right collision	Touch tyre flange → <i>Check the red pressure gauge connected in the</i>
AI44	Code expired	Follow the code entering procedure → <i>See manual page...</i>
AI45	Battery too discharged	→ <i>Put the machine on the station manually, and start it again manually 2 hours later</i>
AI46	No Peripheral Signal	Check at the charging station
AI47	Station not found	The machine has not found its station after a tour of the terrain (function of the P01) → <i>Check P01, verify sonar machine (if it slowed down), check the sonar station (if the machine slowed down on approaching the station)</i>
AI48	Outside wire boundary	→ <i>Check O03: demo mode; O08: inversion phase; P00: intensity at 30</i>
AI49	Wire lost	The machine stops when seeking its wire after 6 m
AI50	No way out path	Blocked at this location after several close manoeuvres
AI51	Slipping	Distance travelled greater than P01 → <i>Check the state of the terrain, check P01</i>
AI52	Blocked on wire	→ <i>Check O08: investment phase</i>
AI53	Fuse. Power surge	Battery fuse broken OR main switch on OFF when charging
AI55	Loss of Charging?	Loss of charging on the station
AI56	Charge contact?	The machine has detected the station but
AI57	Bat Temp Sensor	Problem with the temperature sensor



Important points to verify (1)

• During set-up:

1. Place a **1.5 mm² single strand wire in a sheath** along the terrain border. Use thermo retractable crimp-on connectors with resin. The cable is positioned **between 2 and 5 cm deep**.
2. Maximum **1000 metres** of peripheral wire.
3. Avoid the creation of bottlenecks in the area where the machine moves around.
4. Avoid including an additional area in the work area by a very narrow passage (width of passage: min **5 metres**).
5. Do not leave major irregularities in the terrain (hollows or bumps). Spread sand on the irregular area.
6. The edges of the terrain, delimited by trees or hedgerows must be mowed.
7. Shrubs do not stop the machine, protect them with a 'rigid physical' protection (allow obstacles of a minimum **40 cm** high areas of a maximum 50 cm); remove or protect obstacles of less than 15 cm in height on the terrain.
8. Limit yourself to **5** islands in the working area.
9. Do not place a peripheral wire perpendicular to a steep slope line of more than 15%, (even at the bottom of a slope). Leave a minimum of 1 metre flat.
10. Terrains that are too marshy, not drained, with an accumulation of water at certain periods and/or certain locations must be adapted by effective drainage.
11. Collect the grass before using machine on a terrain for the first time.
12. Do not place an obstacle at less than 2 metres from the layout of the wire when it bypasses an island (to avoid obstacles on the return to the station).
13. Place the station in an area where there are no obstacles near the wire, leave the wire accesses open (on 10 metres before and after the station). The station must be set up in the largest space in the mowing area, and do not set it up in a secluded location or in a secondary area. Insert the peripheral wires and the power supply wire underneath the station via holes of a size equal to the diameter of the sheaths.
14. The station must be positioned on a flat surface of min. 2 metres in front of the station arm. In addition it must have the straightest line possible for 3 metres on both sides of the station (a slight curve without a break is acceptable) BUT a completely straight line for 1 metre on both sides of the station is mandatory.
15. Connect the station in accordance with the current guidelines (terminal protected by differential for the exterior, buried cable...).
16. Protect water features or areas at risk.
17. Keep 15 metres around the station without obstacle.
18. Two stations must be at least 30 metres apart (2*15 m).
19. Protect areas at risk (pond, lake, swimming pool, path...) by a physical obstacle.
20. You can coordinate the automatic sprinklers with the station load arm via an optional accessory (contactor).

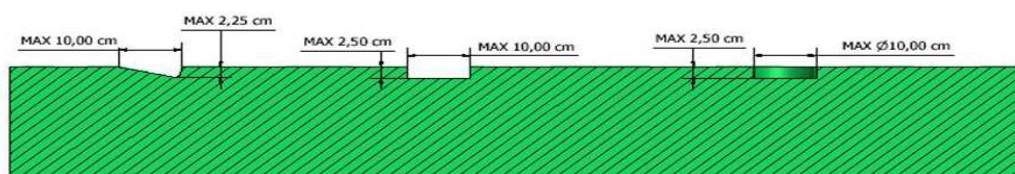


Important points to verify (2)

• During use:

1. Remove from the terrain any object that might block the cutting heads, e.g. tree branches, tools, planks of wood, bars...
2. Do not restart (several times!) the machine when there is a safety alert.
3. Do not carry the machine on a wheelbarrow, pallet truck...
4. The “systematic mode” option on a complex terrain will not operate properly because of the complexity of the terrain (the machine will not go everywhere).
5. When the grass has not been cut for several days, lower the cutting heads from 1 to 2 notches maximum per day to have a perfect lawn after 8 to 10 days.
6. Leave the machine on when it is connected to its charging station. (do not switch off)
7. Tow the machine manually (in order not to have motor resistance, leave the machine on). Do not tow the machine with a tractor, quad or other engine going at a speed faster than human pace.
8. **Don't switch off the machine on charge.**

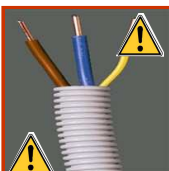
Check of the state of a terrain before use (Bigmow, Ballpicker, Parcmow)



These machines have been made to operate on lawns.

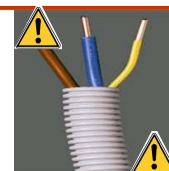
Their use on “off road” annuls all guarantees.

Terrains where there is not a difference in level of more than 2.5 cm depth in a maximum of 10 cm in width, tested with a lathe, will still be considered as lawns.



IT IS ESSENTIAL TO USE THE 1.5 mm² CABLE IN A SEALED TUBE

Any cable other than the 1.5 mm² single strand wire is to be avoided. Belrobotics does not guarantee the operation of the machine with another cable. Any problem that occurs because of incorrect set-up annuls the guarantee.





Notes:

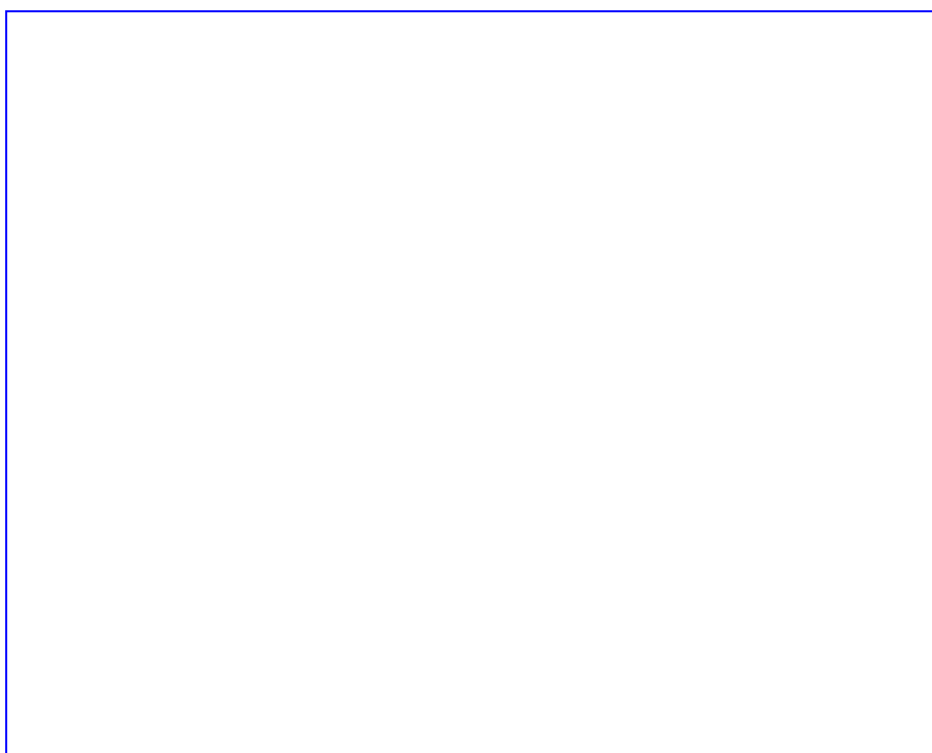
Conversion Tables

metre(s)	cm	inche(s)	yard(s)	Feet
1.00	100.00	39.37	1.09	3.28
0.91	91.44	36.00	1.00	3.00
0.01	1.00	0.39	0.01	0.03
0.0254	2.54	1.00	0.02	0.08
0.3048	30.48	12.00	0.33	1.00

m ²	100m ²	ha	acres
100 m ²	1	0.01	0.025
10000 m ²	100	1.00	2.5
4000 m ²	40	0.40	1
20000 m ²	200	2.00	5







PARCMOW - BIGMOW

Belrobotics SA
Avenue Lavoisier, 16b
B - 1300 Wavre
Belgium

Telephone: 0032 (0) 10 48 00 48
Fax: 0032 (0) 10 48 00 49
E-mail: info@belrobotics.com
Website: www.belrobotics.com